Report for 2001UT3721B: Information Transfer Plan

There are no reported publications resulting from this project.

Report Follows:

Center for Water Resources Research

Annual Technical Report

The Source Water Protection project described under the Research Project section of this report is an integrated research and information transfer project that was planned, developed, and implemented with the collaboration of UCWRR and the relevant State of Utah water agencies. Please refer to the Research Project section of this Annual Report for specific information transfer activities related to the Source Water Protection project supported by the USGS Section 104 funds.

In FY 02, the Utah Water Research Laboratory (UWRL) expended approximately $9.9 million in water research support. USGS Section 104 funds administered through the Utah Center for Water Resources Research (UCWRR) accounted for about one percent of this total and were used for research addressing source water protection (SWP), and outreach, information dissemination,, and strategic planning and water resources and environmental quality issues in the State of Utah.

USGS Section 104 funds were used specifically to address the Utah Source Water Protection Plans (SWPP) during FY 2002-2002 at the request for assistance from the Utah Department of Environmental Quality (UDEQ), Divisions of Water Quality and Drinking Water. Risks to Utah's source water include both point and non-point sources. Several UCWRR faculty members are involved from the Colleges of Engineering, Agriculture, and Natural Resources. The UCWRR has partnered with the UDEQ, Divisions of Water Quality and Drinking Water, to assess NPS pollution as part of the SWPP. As part of this partnership, UCWRR is developing specific information and a database concerning the location and status of on-site wastewater treatment systems in important watersheds in Utah. SWPPs are especially important during periods of lower than normal precipitation that is characteristic of this fiscal year.

Approximately 4,000 on-site wastewater treatment systems are currently installed annually in Utah. UCWRR and UWRL faculty have teamed with the Utah local health departments and with the Utah Department of Environmental Quality to address issues including establishing criteria, testing, and monitoring for decentralized systems. Passage of Utah House Bill 14 (#B-14) for the Utah On-Site Wastewater Treatment Training Center during the 2000 session of the Utah Legislature provides a mechanism to generate funds for training and technology transfer regarding siting, design, installation, maintenance, and monitoring of on-site wastewater treatment systems for local health departments, designers, installers, developers, and state regulators. Air quality issues along the Wasatch Mountains in Utah (Wasatch Front) have been identified by the Governor of Utah as a current and future concern as a result of projected increases in automobile traffic. To address these concerns, the UCWRR has appointed a faculty member (Dr. Randal Martin) during this fiscal year to work with the State of Utah DEQ Air Quality Board in the evaluation and assessment of air quality problems and in developing alternatives to meet air quality standards. New federal source water protection plan requirements require river-basin-wide characterization, assessment, and reevaluation

with regard to risks of contamination of source water from near and far sources. Both point sources and non-point sources (NPS) need to be identified.

Information Transfer

Information Transfer and Outreach within the UCWRR continues to be a form of scholarship that is stimulated, supported, and rewarded in FY 02. Outreach activities through the UCWRR, the UWRL, and Utah State University (USU) have had an impact on the technical and economic development of the State of Utah. As part of the UCWRR outreach activities supported by USGS Section 104 funds, there continues to be a vigorous dialogue and experimentation with regard to efficiency and effectiveness of outreach activities of the UCWRR. Faculty continue to be involved in regular meetings with State of Utah agencies, including the Department of Environmental Quality (DEQ) the Department of Natural Resources (DNR), and the State Engineer Office to provide source water protection, on-site training, non-point source (NPS) pollution assistance, and technology transfer, and development of source water protection plans (SWPPs) within the context of Utah issues.

Principal Outreach Publications

Principal outreach items include the Comprehensive Water Education Grades K-6 manual (several thousand copies of the manual have been distributed throughout the country), newsletters addressing the on-site wastewater issues (Utah WaTCH), and a Mineral Lease Report to the Utah Office of the Legislative Fiscal Analyst UWRL's International Office for Water Education (IOWE) produced and distributed a regional water education calendar to elementary schools in Arizona, California, Colorado, Nevada, New Mexico, Wyoming, Alaska, Hawaii, Idaho, Montana, Oregon, and Washington. The calendar featured the winning posters from the K-6 poster contests conducted in the seven Colorado River and Columbia River states. It also included lessons, questions with answers, and facts about water. A separate water education calendar was produced and distributed to all elementary school classrooms in Utah. UWRL prepared two water education manuals for 4^{th} grade elementary school teachers and students.

Technical publications in FY 01-02 that were partially supported by the cooperative program described in this report are listed below. Other publications from the Utah Water Research Laboratory appear regularly as technically reviewed project reports, professional journal articles, other publications and presentations, theses and dissertation papers presented at conferences and meetings, and project completion reports to other funding agencies.

Longhurst, M. and Smith, G.G. (2002). The Search for the Water Cycle Teachers Edition and Student Findings Booklet. Utah Water Research Laboratory, Utah State University, Logan, UT.

Sims, J.L. and M. Cashell (2002). Basic Site Evaluation Techniques for On-Site Wastewater Treatment. Utah Water Research Laboratory, Utah State University, Logan, UT.

Sims, J.L. and M. Cashell (2002). Fundamentals of On-Site Wastewater Treatment and Disposal Systems. Utah Water Research Laboratory, Utah State University, Logan. UT.

Smith, G.G. (2001-2003). Powell States and Columbia Water Education Calendar. International Office for Water Education, Utah Water Research Laboratory, Utah State University, Logan, UT.

Smith, G.G. (2002). Substitute Teacher Handbook (Elementary V Edition). International Office for Water Education, Utah Water Research Laboratory, Utah State University, Logan, UT.

Smith, G.G. (2002). Substitute Teacher Handbook (Secondary V Edition). International Office for Water Education, Utah Water Research Laboratory, Utah State University, Logan, UT.

Smith, G.G. (2002). SubJournal, Best Practices in the Management of Substitute Teaching. Substitute Teaching Institute, Utah State University, Logan UT.

Utah Water Research Laboratory (2002). Stewardship Through Collaboration: Research and Testing, Education Support, and Outreach for July 1999-June 2001. Utah State University, Logan, UT.